NETernity SWE550S

OpenWare™ Managed 6U VPX 25/100G Ethernet Switch, Aligned with SOSA™ Standard

The NETernity SWE550S is a fully managed (Layer 2/3) rugged 6U VPX Ethernet Switch with 25/100G Ethernet. The SWE550S runs Abaco's in-house developed and supported OpenWare switch management software, providing a powerful, secure, and easy to use environment for configuring this and any NETernity switch.

The SWE550S is aligned with the 6U SOSA switch profile whilst also offering up to 7x rear and 2x front panel 100G-SR4 rugged fiber ports. The SWE550S is also available with a rear IO configuration that is compatible with the SWE540A. All copper and fiber quad ports (fat pipes) can be reconfigured to run as four discrete ports (thin pipes), allowing for greater network flexibility. Each copper channel supports speed downgrading from 25/100G to 10/40G, making it simple to connect and switch between higher and lower speed end points. The optional 100GBASE-SR4 rugged fiber modules provide flexibility for connecting across greater distances. 2x rear in-band 1000BASE-T are provided as standard, air-cooled variants also have 2x front panel 1000BASE-T ports.

The SWE550S uses a leading edge 3.2Tbps high-performance switch fabric to provide full wire-speed switching and data center

grade protocols. The high-performance switch fabric is combined with a highly-efficient dual core ARM based processor to run OpenWare. OpenWare has be tailored to maximise the performance and power efficiency of the switch fabric, helping to offer 2.5 times the bandwidth for around 2 times the power of a similar 10/40G 3U VPX SOSA switch.

OpenWare™ can be modified to meet customer requirements and provides a number of ways to manage the switch via serial console, SNMP, Telnet, SSH or web interface. The sanitization capability allows a user to overwrite non-volatile storage as required.

The SWE550S is proven to work with other Abaco Systems HPEC products such as the SBC6511, VP461, IPN254, and HPC2812. For 3U applications, the NETernity SWE450S provides the same switching functionality in a smaller form factor.

FEATURES:

- 6U VPX form factor
- SOSA profile aligned for:
  - SLT6-SWH-14F16U1U15U1J-12.8.1-0
  - SLT6-SWH-14F16U1U15U1J-12.8.1-3
- SWE540A compatible profile:
  - 22F1J legacy profile
- Supports connectivity and performance options for:
  - 100GBASE-KR4, 25GBASE-KR
  - 100GBASE-SR4, 25GBASE-SR
  - 40GBASE-KR4, 10GBASE-KR
  - 1000BASE-T
- OpenWare Switch Management Software, with enhanced support for:
  - Data Center Bridging (DCB) including PFC & ECN
- Precision Time Protocol 1588v2 Transparent Clock Support
- Air and Conduction Cooled Options
- Rugged Levels 1, C, E available
- IPMI

Abaco SYSTEMS

AMETEK®

SWE550S *OpenWare Managed 6U VPX 25/100G Ethernet Switch, Aligned with SOSA*

Specifications

Switching and Management
- Next generation 3.2Tbps switch fabric
- High efficiency dual-core ARM based CPU
- Abaco OpenWare switch management software as standard

SOSA profile aligned for:
- SLT6-SWH-14F16U1U15U1J-12.8.1-0
- SLT6-SWH-14F16U1U15U1J-12.8.1-3

SWE540A compatible profile:
- 22F1J legacy profile operable with SLT6-SWH-16U20F, SLT6-SWH20U19F, and SLT6-SWH-16U16F (no P6B connectivity)

Front Panel
- Optional 2x 100GBASE-SR4 with MPO
- 2 X 1000BASE-T (air cooled only)
- USB-C (OOB and COM)

Rear
- 87x or 88x 25GBASE-KR (21x or 22x 100GBASE-KR4)
- Optional 1x, 4x, 7x 100GBASE-SR4
- 2 x 1000BASE-T In-band
- LVCMOS / RS232 COM

Form Factor and Mechanical
- SOSA aligned 6U VPX
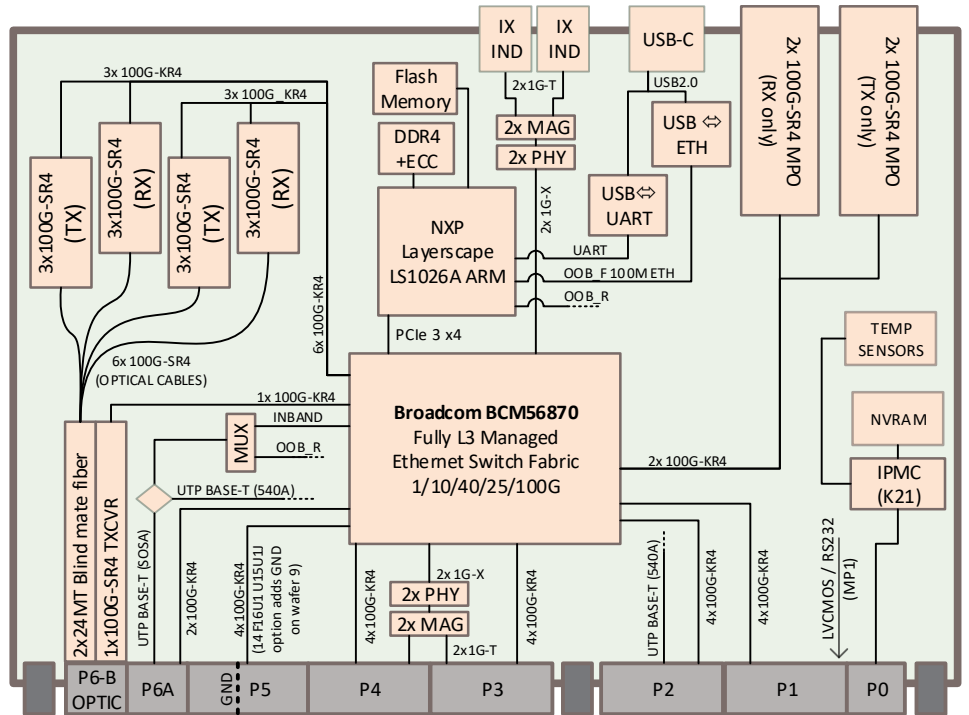- Air and Conduction Cooled options
- Rugged Levels 1, C, E

Power Requirements
- Estimated maximum power of 170W depending on IO and network configuration

MTBF
- TBD

Block diagram